

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

OUR WICKED LADY, LLC,
(d/b/a “Our Wicked Lady”) *et al*,

Plaintiffs,

-against-

ANDREW M. CUOMO, in his official capacity as
Governor of the State of New York, *et al.*,

Defendants.

DECLARATION

No. 1:21-cv-00165

EMILY C. LUTTERLOH, M.D., MPH, on the date noted below and pursuant to § 1746 of title 28 of the United States Code, declares the following to be true and correct under penalty of perjury under the laws of the United States of America:

1) I am the Acting Director of the Division of Epidemiology, New York State Department of Health (“Department”). As such, I coordinate the Department’s efforts to investigate, reduce, and prevent outbreaks and transmission of infectious diseases.

2) I received my medical degree in 1998 from Indiana University School of Medicine. In 2010, I received my Master of Public Health (“MPH”) degree from Johns Hopkins University. Prior to joining the Department of Health in 2010, I served as an attending physician in pediatric infectious disease, and then as a Lieutenant Commander and Epidemic Intelligence Service Officer in the U.S. Public Health Service. I have been licensed to practice medicine in New York State since 2010 and I am Board Certified in Infectious Disease and Pediatric Infectious Disease.

3) I am familiar with the facts set forth herein based upon personal knowledge, discussions with Department staff, and Department records.

- 4) I make this declaration in opposition to the Complaint.

COVID-19 Background

5) On January 7, 2020, following an outbreak of pneumonia of unknown etiology in Wuhan City, in the Hubei Province of China, Chinese authorities identified a novel coronavirus—COVID-19. Its spread around the world has been well documented. **Exhibit A.**

6) COVID-19 is a highly infectious and potentially deadly respiratory disease caused by a novel coronavirus that spreads easily from person-to-person. **Exhibit B.**

7) Because there is no pre-existing immunity against this new virus, it has spread worldwide in an exceptionally short period of time, posing a “serious public health risk.” Id.

8) On January 30, 2020, the World Health Organization (“WHO”) declared a “Public Health Emergency of International Concern.” **Exhibit C.**

9) Less than two months later, on March 11, 2020, the WHO declared a COVID-19 global pandemic. **Exhibit D.**

10) On March 13, 2020, the President of the United States declared a national emergency. **Exhibit E.**

11) The rapid spread of COVID-19 in New York, in the United States, and worldwide presented and continues to present a grave threat to New Yorkers and to New York’s health care system. However, New York has mitigated that threat by taking strong action to ensure social distancing as well as other important measures. Responsible parties, business owners, and the public must continue to adhere to the Executive Orders and guidance to prevent a devastating resurgence of COVID-19 that could again overwhelm our healthcare system.

- 12) At the end of September, the grim milestone of more than 1,000,000 deaths

worldwide was crossed. As of February 22, 2021, John Hopkins reports that 2,477,062 people have died of COVID-19 worldwide; 500,585 people have died in the United States;¹ and 37,941 have died in the State of New York of COVID-19.²

COVID-19 Surges in New York

13) New York recorded its first cases of COVID-19 on March 1, 2020, in New York City and on March 2, 2020, in Westchester County.

14) On March 7, 2020, Governor Cuomo issued Executive Order 202, which declared a State of Emergency. **Exhibit F.** As of March 7, 2020, at least 60 people had tested positive for COVID-19 in the State of New York.³ Cases in the United States totaled 403.⁴ Cases worldwide totaled 103,930, with 3,510 deaths reported.⁵

15) By March 20, 2020, the number of individuals testing positive for COVID-19 in New York was over 10,000, and deaths exceeded 150 in the State.⁶

16) By April 20, 2020, just one month later, over 251,690 individuals had tested positive for COVID-19, and over 15,000 people had died from COVID-19 in New York State. Id.

17) These events placed significant strain on New York State's healthcare system. For

¹ Johns Hopkins Coronavirus Resource Center COVID-19 Dashboard, found at <https://coronavirus.jhu.edu/map.html> (last viewed February 23, 2021).

² NYSDOH COVID-19 Fatalities Tracker, <https://covid19tracker.health.ny.gov/views/NYS-COVID19-Tracker/NYSDOHCOVID-19Tracker-Fatalities?%253Aembed=yes&%253Atoolbar=no&%3AisGuestRedirectFromVizportal=y&%3Aembed=y> (last viewed February 23, 2021).

³ NYSDOH COVID-19 Tracker, found at <https://covid19tracker.health.ny.gov/views/NYS-COVID19-Tracker/NYSDOHCOVID-19Tracker-DailyTracker?%3Aembed=yes&%3Atoolbar=no&%3Atabs=n#/views> (last viewed February 23, 2021).

⁴ See <https://coronavirus.jhu.edu/us-map> (last viewed February 23, 2021).

⁵ WHO Coronavirus Disease (COVID-19) Dashboard, found at <https://covid19.who.int/> (last viewed February 23, 2021).

⁶ See <https://covid19tracker.health.ny.gov/views/NYS-COVID19-Tracker/NYSDOHCOVID-19Tracker-DailyTracker?%3Aembed=yes&%3Atoolbar=no&%3Atabs=n#/views> (last viewed February 23, 2021).

example, as the virus spread, New York faced a shortage of hospital beds, ventilators, and personal protective equipment such as masks and gloves.

18) As a result, alternate care sites were set up, including at the Javits Center in New York City. The United States Navy sent the U.S.N.S. Comfort, a Mercy-class hospital ship, to New York to assist with medical care.

New York State on PAUSE to New York Forward

19) Among other measures aimed at flattening the curve, slowing the spread of COVID-19, and preventing the health care system from becoming overburdened, Governor Cuomo issued multiple Executive Orders restricting gatherings.

20) On March 12, 2020, gatherings in excess of 500 people were prohibited by Executive Order 202.1. **Exhibit G.** It further prohibited businesses from operating at no greater than 50% capacity and gatherings or events whose attendance is anticipated to be less than 500 people to restrict attendance to 50% capacity. See id. On March 16, 2020, gatherings in excess of 50 people were prohibited by Executive Order 202.3. **Exhibit H.** It further restricted all on-premises consumption of food and beverages at bars and restaurants in the State. See id. All bars, restaurants, gambling establishments, gyms, and movie theaters were closed indefinitely. Id. Additionally, Executive Order 202.4 ordered all non-essential State and local workers to stay home, “except for those personnel essential to the . . . response to the COVID-19 emergency.” **Exhibit I.** All schools were directed to be closed no later than March 18, 2020. Id.

21) On March 18, 2020, Executive Order 202.5 closed all indoor common portions of malls, as well as “all places of public amusement, whether indoors or outdoors, including but not limited to, locations with amusement rides, carnivals, amusement parks, water parks, aquariums,

zoos, arcades, fairs, children’s play centers, funplexes, theme parks, bowling alleys, family and children’s attractions.” **Exhibit J.** Additionally, Governor Cuomo issued Executive Order 202.6, concerning the immediate reduction of in-person workforces at all business locations throughout the State, except essential businesses. **Exhibit K.** Executive Order 202.6 listed what businesses and services in New York State were deemed “essential” and directed Empire State Development (“ESD”) to issue guidance to further clarify which businesses would be considered “essential” or “non-essential.” Id.

22) On March 20, 2020, the Governor announced the New York State on PAUSE initiative.

23) The 10-point New York State on PAUSE plan is as follows:

- All non-essential businesses statewide closed, effective March 22, 2020, at 8:00 p.m.;
- Non-essential gatherings of individuals of any size for any reason (e.g., parties, celebrations or other social events) are canceled or postponed;
- Any concentration of individuals outside their home must be limited to workers providing essential services and social distancing should be practiced;
- When in public, individuals must practice social distancing of at least six feet from others;
- Businesses and entities that provide other essential services must implement rules that help facilitate social distancing of at least six feet;
- Individuals should limit outdoor recreational activities to non-contact and avoid activities where they come in close contact with other people;
- Individuals should limit use of public transportation to when

absolutely necessary and should limit potential exposure by spacing out at least six feet from other riders;

- Sick individuals should not leave their home unless to receive medical care and only after a telehealth visit to determine if leaving the home is in the best interest of their health;
- Young people should also practice social distancing and avoid contact with vulnerable populations; and
- Use precautionary sanitizer practices such as using isopropyl alcohol wipes.

Exhibit L.

24) Under Executive Order 202.6, effective March 20, 2020, Governor Cuomo directed all non-essential businesses to close in-office personnel functions. Essential businesses, as defined in the ESD Guidance, were not subject to the in-person restriction, but were, however, directed to comply with the guidance and directives for maintaining a clean and safe work environment issued by the Department and were strongly urged to maintain social distancing measures to the extent possible.

25) The idea is to slowly reopen and permit individuals to gather based on the data showing a decline in transmission. Given the potential for airborne spread of the virus, reducing density and maintaining distance, in combination with the wearing of masks, are critical to reducing the risk of transmission of COVID-19. See infra, ¶¶ 65-69

26) On March 23, 2020, the Governor issued Executive Order 202.10, which banned “[n]on-essential gatherings of any size for any reason.” **Exhibit M.** All of these measures were aimed at eliminating situations in which people were likely to congregate and mingle in a way that could increase the spread of the COVID-19 virus.

27) On April 12, 2020, Executive Order 202.16 directed essential businesses to provide

employees who are present in the workplace with a face covering, at no-cost, that must be used when in direct contact with customers or members of the public during the course of their work.

Exhibit N.

28) On April 15, 2020, Executive Order 202.17 directed that any individual who is over age two and able to medically tolerate a face-covering must cover their nose and mouth with a mask or cloth face-covering when in a public place and unable to maintain, or when not maintaining, social distance. **Exhibit O.**

29) On April 26, 2020, Governor Cuomo announced an approach to reopen industries and businesses in New York in phases, based upon a data-driven, regional analysis. On May 4, 2020, the Governor stated the regional analysis would consider several public health factors, including new COVID-19 infections, as well as health care system, diagnostic testing, and contact tracing capacity.

30) On May 11, 2020, Governor Cuomo announced that Phase One would begin on May 15, 2020 in several regions of New York, based upon available regional metrics and indicators.

31) On May 29, 2020, Governor Cuomo announced that Phase Two would begin in several regions of the State, and announced the use of a new early warning dashboard that aggregates the State's expansive data collection efforts for New Yorkers, government officials, and experts to monitor and review how the virus is being contained to ensure a safe reopening. Executive Order 202.34 authorized business operators/owners with the discretion to deny admittance to individuals who fail to comply with the face covering or mask requirements. **Exhibit P.**

32) On June 11, Governor Cuomo announced that Phase Three would begin on June 12, 2020 in several regions of New York.

33) All of these measures were aimed at eliminating situations in which people were likely to congregate and mingle in a way that could increase the spread of the COVID-19 virus.

April, May, and June 2020—New York Flattens the Curve

34) Before the New York State on PAUSE initiative, the daily increase in the number of positive COVID-19 tests had been rising quickly. On March 19, the number of positive tests increased nearly 70%, from 1,769 to 2,950. On April 9, 2020, alone, over 10,000 people tested positive for COVID-19. From mid-April 2020, the number of positive tests per day generally declined steadily through early fall. On May 28, 2020, 1,551 people tested positive for COVID-19 out of 67,341 tested – a positivity rate of 2.3%. On June 29, 2020, 52,025 people were tested and only 524 tested positive—a positivity rate of 1.0%.⁷

Success of New York Forward

35) When New York transitioned from New York State on PAUSE to New York Forward, four phases were created to guide non-essential businesses and offices, as well as the essential businesses that remained open, on how to reopen.⁸

36) Due to the success of the people of the State of New York at flattening the curve, all regions are currently in Phase Four.⁹

37) The Department is constantly monitoring transmission and infection rates.¹⁰

⁷ See <https://covid19tracker.health.ny.gov/views/NYS-COVID19-Tracker/NYSDOHCOVID-19Tracker-DailyTracker?%3Aembed=yes&%3Atoolbar=no&%3Atabs=n> (last viewed February 23, 2021).

⁸ See <https://forward.ny.gov/ny-forward> (last viewed February 23, 2021).

⁹ Id.

¹⁰ See COVID-19 Early Warning Monitoring System Dashboard, <https://forward.ny.gov/early-warning-monitoring-dashboard> (last viewed February 23, 2021).

38) New York Forward provided the framework to relax restrictions so to allow for larger gatherings, providing transmission and infection rates remained stable.

39) New York successfully reduced the spread of the virus by following the guidelines and requirements, such as social distancing and wearing masks. As testing throughout the State increased, the number of positive cases generally decreased.¹¹

40) The transmission rate, also known as the reproduction rate—which measures the number of individuals infected on average by an infected individual—is estimated at 0.94 using data as of February 21, 2021.¹²

41) The goal of all restrictions in the Executive Orders and guidance is to mitigate risk and reduce the opportunity for the virus to spread.

The Pandemic Continues to Present a Grave Threat to Health and Safety

42) Despite the gains that New York has made, the pandemic is not over as numbers have continued to increase in many areas of the Nation and world, and a new strain of the virus (the UK strain) has now been confirmed in New York. **Exhibit Q.** “[T]his UK strain is reported to be 70 percent more contagious than the normal COVID strain.” *Id.*

43) New York hospitals have been operating in crisis management mode since December 16, 2020, which requires preparation and coordination of hospitals within a system as well as having independent (unaffiliated) hospitals track the increased load of cases in their zip code. **Exhibit R.** The goal is to manage the load of an increase in COVID-19 patients.

44) One of the key concerns in this regard is to ensure that New York State does not

¹¹ See COVID-19 Percentage Positive Results By Region Dashboard, <https://forward.ny.gov/percentage-positive-results-region-dashboard> (last viewed February 23, 2021).

¹² See COVID-19 Estimates for New York, <https://covidestim.org/us/NY> (last viewed February 23, 2021).

return to the infection levels experienced last spring when the hospitals were overwhelmed, which can lead to further unnecessary deaths. During the spring, many doctors and nurses came to New York to help as it had become the epicenter for the pandemic. Now that the entire nation is facing high infection rates, New York can no longer rely on the reserve of additional volunteers.

45) On February 22, 2021, Johns Hopkins reported that globally, 111,845,517 individuals to date had tested positive for COVID-19, and a total of 2,477,062 confirmed COVID-19 deaths worldwide.¹³ In addition, 28,194,534 individuals in the United States had tested positive for COVID-19 to date, and a total of 500,585 had died of COVID-19. Id.

46) A resurgence of the COVID-19 pandemic has swept through the United States this winter, now with multiple highly transmittable variants. The United States has reported the highest seven-day moving average of new COVID-19 cases with the highest number of new cases reported in a single day on January 8, 2021 – 314,972.¹⁴

47) New York experienced dramatically rising rates from September through December. For example, on September 1, 2020, 88,447 people were tested for COVID-19 in New York State, with a total of 708 individuals testing positive – a positivity rate of 0.8%.¹⁵ However, by comparison, on December 31, 2020, 219,253 individuals were tested, with 16,497 testing positive, reflecting a daily positivity rate of 7.5%. Id.

48) While the rates remained level through most of January 2021, they began trending downward. Therefore, it is critical that restrictions are reduced slowly, and the data should be

¹³ See <https://coronavirus.jhu.edu/map.html> (last viewed February 23, 2021).

¹⁴ Found at https://covid.cdc.gov/covid-data-tracker/?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fcases-updates%2Fcases-in-us.html#trends_dailytrendscases (last viewed February 23, 2021).

¹⁵ See <https://forward.ny.gov/percentage-positive-results-region-dashboard> (last viewed February 23, 2021).

monitored for any surges in positive cases that could result from reopening too fast. Id.

49) In New York, looking at testing data as of February 21, 2021, the total number of individuals to date who had tested positive for COVID-19 was 1,584,931,¹⁶ and the number of individuals who had died of COVID-19 was 37,941.¹⁷

Dangers of COVID-19 Variants

50) The COVID-19 variants discovered in New York and around the world create an increased risk for transmission and exacerbate the danger in situations that are already considered risky by their nature.

51) The CDC conducts surveillance on SARS-CoV-2 strains to create a library of the various specimens and sequences to better assist in the public health response. **Exhibit S.** The most notable emerging variants were discovered in the United Kingdom (“UK” variant), South Africa, and Brazil. Id. Globally, scientists are seeking to understand the ease of the variants’ transmission and the efficacy of existing vaccines against them. Id. A great deal of new information about the variants’ “virologic, epidemiologic, and clinical characteristics” is developing. Id.

52) Some of the potential consequences of new and emerging variants could include:

- a) The ability to spread more quickly and infect more people,
- b) Could cause mild or more severe disease in those who contract it,
- c) Could evade detection by specific diagnostic tests,

¹⁶ See <https://covid19tracker.health.ny.gov/views/NYS-COVID19-Tracker/NYSDOHCOVID-19Tracker-Map?%253Aembed=yes&%253Atoolbar=no&%3AisGuestRedirectFromVizportal=y&%3Aembed=y> (last viewed February 23, 2021).

¹⁷ See <https://covid19tracker.health.ny.gov/views/NYS-COVID19-Tracker/NYSDOHCOVID-19Tracker-Fatalities?%253Aembed=yes&%253Atoolbar=no&%3AisGuestRedirectFromVizportal=y&%3Aembed=y> (last viewed February 23, 2021).

- d) Decrease the susceptibility to therapeutic agents such as monoclonal antibodies,
- e) Potential to evade natural or vaccine-induced immunity.

Id.

53) Each of these potential effects can increase the risk of transmission presented by certain activities, such as indoor dining, that by their nature require individuals to disregard certain protective measures; i.e., masking and distancing.

Restaurants and Bars Present Risks for Community and Close Contact Exposures

54) The highly transmissible variants of COVID-19 underscore the dangers and risks presented by indoor dining and the ease with which the virus could potentially spread through a community. Currently, both the UK and South African variants have been detected in New York State.

55) Restrictions on the operation of non-essential businesses, indoor gatherings, and indoor dining, in particular, are necessary to ensure sufficient space for proper distancing, thereby reducing potential transmission rates.

56) It is important to take a slow and measured approach to reopening indoor dining to minimize the risk of transmission and potential outbreak.

57) “Transmission of SARS-CoV-2 can occur through direct, indirect, or close contact with infected people through infected secretions such as saliva and respiratory secretions or their respiratory droplets, which are expelled when an infected person coughs, sneezes, talks or sings.”

Exhibit T.

58) In October 2020, the WHO updated their guidance to confirm that SARS-CoV-2

can spread through aerosol transmission: “[t]he virus can spread from an infected person’s mouth or nose in small liquid particles when they cough, sneeze, speak, sing or breathe heavily. These liquid particles are different sizes, ranging from larger ‘respiratory droplets’ to smaller ‘aerosols.’”

Exhibit U. On October 5, 2020, the CDC also released updated COVID-19 guidance to include information about how the COVID-19 virus can spread through airborne transmission. **Exhibit V.**

59) “Current evidence suggests that SARS-CoV-2 may remain viable for hours to days on surfaces made from a variety of materials.” **Exhibit W.**

60) COVID-19 has an incubation period of up to fourteen days. See Exhibit T. Many individuals infected with the COVID-19 virus are asymptomatic but can transmit the virus to others. Id.

61) People infected with COVID-19 may experience a wide range of symptoms, including fever, chills, cough, shortness of breath, difficulty breathing, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, or diarrhea. **Exhibit X.** Other than a fever, these symptoms cannot be detected in an objective manner.

62) Social distancing is one of the most effective means of limiting transmission of COVID-19. **Exhibit Y.** The CDC guidance recommends that people comply with social distancing measures in order to prevent the spread of COVID-19. According to the CDC, “[l]imiting close face-to-face contact with others is the best way to reduce the spread” of COVID-19. Id.

63) Other research articles also found that physical distancing is an effective way to

mitigate the risks of spreading COVID-19. **Exhibit Z.**¹⁸

64) Social distancing (referred to as “physical distancing” or “physical separation” in the research article) is “one of the effective means to combat the spread of virus. Increasing evidence suggested that not just droplets, but aerosolization of viral particles is a possible transmission mechanism. Thus, distancing is not a foolproof to avoid contracting the virus, although it is still strongly recommended.” Id. “The underlying principle is to avoid close contact.” Id.

65) In order to limit exposure to COVID-19 and slow its spread, the CDC recommends keeping “at least [six] feet away from other people” and limiting close contact with others “who are not from your household in both indoor and outdoor spaces,” including avoiding groups and crowded places. See Exhibit Y. Social distancing “is one of the best tools we have to avoid being exposed to this virus and slowing its spread in communities” because it “helps limit opportunities to come in contact with contaminated surfaces and infected people outside the home.” Id.

66) The CDC recommends modifying layouts and procedures to allow for social distancing, including reduced seating capacity. **Exhibit AA.**¹⁹ However, even with seating capacity reduced and tables spaced at least six feet apart, indoor dining is considered a higher-risk activity. Id. This is because another important tool in preventing COVID-19 transmission is wearing a mask, and patrons are unable to wear a mask while eating. Id.; see also Exhibit BB.

67) While “mask mandates have generated controversy” and “opponents of mask mandates have even sued state governments to block them,” “numerous scientific studies confirm

¹⁸ Also found at <https://doi.org/10.1371/journal.pone.0242398>.

¹⁹ Also, available at <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/business-employers/bars-restaurants.html> (last viewed February 23, 2021).

that the simple act of wearing masks in public can significantly slow its spread [of COVID-19].”

Exhibit CC.

68) The “CDC recommends community use of masks, specifically non-valved multilayer cloth masks, to prevent transmission of SARS-CoV-2. Masks are primarily intended to reduce the emission of virus-laden droplets (“source control”), which is especially relevant for asymptomatic or presymptomatic infected wearers who feel well and may be unaware of their infectiousness to others, and who are estimated to account for more than 50% of transmissions.”

Exhibit DD.

69) “Masks also help reduce inhalation of these droplets by the wearer (‘filtration for personal protection’). The community benefit of masking for SARS-CoV-2 control is due to the combination of these effects; individual prevention benefit increases with increasing numbers of people using masks consistently and correctly.” Id.

70) “Multi-layer cloth masks block release of exhaled respiratory particles into the environment, along with the microorganisms these particles carry. Cloth masks not only effectively block most large droplets (i.e., 20-30 microns and larger) but they can also block the exhalation of fine droplets and particles (also often referred to as aerosols) smaller than 10 microns; which increase in number with the volume of speech and specific types of phonation. Multi-layer cloth masks can both block up to 50-70% of these fine droplets and particles and limit the forward spread of those that are not captured.” Id.

71) A recent study in South Korea on airborne transmission of COVID-19 in a restaurant indicates that even distancing six feet may not be enough to prevent transmission.

Exhibit EE.

72) The research team in that study reproduced the conditions at a restaurant in Jeonju, South Korea, where an out-of-town visitor infected two diners. One was a high school student who became infected after five minutes of exposure from more than 20 feet away. Id.

73) The investigative research team believed the spread was caused by “long-distance droplet movement by airflow.” **Exhibit FF.**

74) The South Korean study found that “[e]ating indoors at a restaurant is one of the riskiest things you can do in a pandemic.” See Exhibit EE.

75) For example, typically a restaurant patron will not be able to socially distance from other patrons and staff during the entirety of their dining experience and will necessarily be unable to wear a mask during the majority of time spent in this activity; e.g., while eating and drinking. “Even if there is distancing, as this shows and other studies show, the distancing is not enough.” Id.

76) The South Korean study further concluded that airflow has a direct impact on the pattern of infection and “[t]hese findings strongly suggest that this outbreak occurred by droplet transmission exceeding a 2 m distance and excluded contact and fomite transmission.” See Exhibit FF.

77) “The pattern of infection in the restaurant showed it was transmission through droplets landing on the face rather than from aerosols, which are breathed in, said Marr, the Virginia Tech professor who was not involved in the study. The measured air velocity in the restaurant, which did not have windows or a ventilation system, was about a meter per second, the equivalent of a blowing fan.” See Exhibit EE.

78) A similar study on air flow and droplet transmission in restaurants was conducted in China after an outbreak. It concluded “that in this outbreak, droplet transmission was prompted by air-conditioned ventilation. The key factor for infection was the direction of the airflow.” **Exhibit GG.** Furthermore, “[t]o prevent spread of COVID-19 in restaurants, we recommend strengthening temperature-monitoring surveillance, increasing the distance between tables, and improving ventilation.” Id.

79) As indicated in the South Korean and Chinese studies, emerging science indicates that COVID-19 is transmissible through inadequately ventilated closed spaces, such as restaurants, including through strong airflow from air conditioners. **Exhibit HH.**

80) These facts have borne out in the current pandemic. For instance, one analysis has found that in states that reopened indoor dining early, transmission rates of COVID-19 increased. **Exhibit II.** Rates then went down again after indoor dining was closed. Id.; see also **Exhibit JJ.**

81) A recent report from the CDC confirms this finding and attributes the increased risk associated with indoor dining to the fact that patrons are not able to wear masks while eating and drinking. That report “found that close contact with persons with known COVID-19 or going to locations that offer on-site eating and drinking options were associated with COVID-19 positivity. Adults with positive SARS-CoV-2 test results were approximately twice as likely to have reported dining at a restaurant than were those with negative SARS-CoV-2 test results.” **Exhibit KK.**

82) A restaurant’s compliance with the Department’s guidance and protocols does not eliminate the risk of transmission in the indoor dining environment. For instance, in one reported case from Washington State, 24 customers and one employee of a restaurant tested positive for COVID-19, despite the restaurant’s compliance with public health guidelines. See **Exhibit JJ.**

Food Service

83) Given the additional risks inherent with indoor dining, as compared to other activities, such as retail businesses, the limits and reductions that are implemented are reducing density of patrons as the level of virus transmission increases to prevent continued community spread of COVID-19. This is even more crucial now with the highly transmissible UK strain of the virus confirmed in New York State.

84) There are guidelines for food services that explain what actions must be taken and recommended best practices for implementation. See Exhibit LL.

85) Physical distancing, reducing density, and proper use of PPE, personal protective equipment, such as masks and gloves play a significant role in preventing spread of the virus. Id.

86) Consistent with guidance issued by the CDC and WHO, the restrictions in the Executive Orders and guidance issued pursuant to those orders are developed in consultation and cooperation with the Department's medical staff, with the goal of rapidly addressing COVID-19 outbreaks in the affected areas in order to mitigate risk to the public and reduce the opportunity for the virus to spread.

87) Due to the unrelenting spread of the virus and the risk posed by the pandemic, these directives are constantly being reviewed and renewed beyond their initial 30 days when reasonably necessary to protect the public; and if the State were enjoined from implementing the measures contained in these directive, it would severely impair the State's efforts to combat COVID-19 at an especially perilous time when positivity rates and deaths remain high, new variants of the virus are present in New York State, and vaccinations are still being rolled out.

New York City Restaurants Are In A Unique Area

88) On December 11, 2020, Governor Cuomo announced that New York City indoor dining would close on December 14, 2020, pursuant to Executive Order 202.81. **Exhibit MM.** This Order was extended until February 6, 2021 by Executive Order 202.89. **Exhibit NN.** Additionally, New York City issued FAQs and the State Liquor Authority (“SLA”) issued guidance for the closure of New York City indoor dining. **Exhibits OO and PP**, respectively. On February 8, 2021, Governor Cuomo announced that New York City indoor dining could reopen at 25% capacity on February 12, 2021. **Exhibit QQ.** On February 19, 2021, the Governor announced limits would be increased to 35% effective February 26, 2021. **Exhibit RR.**

89) Plaintiffs’ businesses are located in New York City, where, using testing data as of February 22, 2021, the seven-day rolling average for positive results is 4.5%, with the 14-day rolling average at 4.4%.²⁰ The daily positivity rates for February 16 and 17, 2021 were 4.5% and 3.7%, respectively. Id. New York City’s daily positivity rate has been as high as 5.9% on February 1, 2021. Id. These rates are concerning as they indicate rapid spread of the virus in New York City. The daily positivity rates in New York City on November 1, 2020 was 1.5%. Id.

90) Positivity rates and the restrictions in place outside of New York City are not appropriate comparators to those in New York City with respect to indoor dining and COVID-19 because New York City is an extremely densely populated metropolitan area that was hit particularly hard by the COVID-19 pandemic only a short time ago. Given the sheer number of people living, working, commuting, and potentially eating in restaurants within this relatively small geographic area, the potential for increased COVID-19 transmission and resulting fatalities

²⁰ See <https://forward.ny.gov/percentage-positive-results-region-dashboard> (last viewed February 23, 2021).

is a significant factor in the Department's public health risk analysis. See Exhibits SS and TT.

91) New York City is a densely populated metropolitan area and this high population increases the risk of exposure to COVID-19 for patrons as well as employees in a restaurant. "SARS-CoV-2, the virus that causes COVID-19, is primarily spread from person to person through respiratory droplets. Workers in high-density settings in which workers are in the workplace for long time periods (e.g., for 8-12 hours per shift), and have prolonged close contact (within 6 feet for 15 minutes or more) with coworkers may be at increased risk for exposure to SARS-CoV-2." **Exhibit UU.**

92) Accordingly, based on available evidence, the restriction on indoor dining in New York City restaurants is a responsible public health measure aimed at mitigating the spread of COVID-19 in the wake of these unprecedented times.

Personal Fitness

93) Fitness industry Plaintiffs were permitted to operate on or after August 24, 2020, pursuant to Executive Order 202.57, so long as they adhere to Department guidance. **Exhibits VV.**

94) The Gym and Fitness Centers Guidelines state fitness centers "must limit the number of participants in fitness classes or group activities to the lesser of:

- a) The number of individuals that the space can accommodate such that there is a minimum distance of six feet between individuals at all times;
- b) 33% of the typical class size (i.e., leave stations, cycles, or other equipment vacant); or
- c) The number of individuals permitted by the State's social gathering limit for the region in which the gym or fitness center is located."

Exhibit WW. Six feet of distance must also be maintained between individuals at all times, including between the instructor(s) and patrons. Id.

95) For all risk level activities, fitness centers “should discourage hands-on adjustments in classes (e.g., yoga, Pilates), unless necessary to mitigate a health or safety risk.” Id. Effective February 1, 2021, higher risk activities (such as martial arts) are no longer prohibited, but must be limited to “individual or distanced group training and organized no/low-contact group training.” Id.; See also Exhibit XX.

96) However, in New York City, “the mayor [] may decide to opt-out of indoor group fitness and aquatic classes within their jurisdiction, postponing their resumption until a later date.” See Exhibit WW.

97) The ultimate goal is to reopen all businesses, but it must be done safely. Restrictions have been lifted on physical activities and exercise opportunities where the Department is satisfied that the risks are sufficiently low. Initially, working out in indoor fitness centers or gyms was excluded. The State has taken steps to review many physical activities and has made some allowances for certain activities to take place, including fitness centers, but with restrictions and limits on the number of people who can exercise at a given time. Local authorities were also delegated authority to address potential additional specific concerns related to their jurisdictions and impose heightened restrictions.

A Capacity Cap is Warranted for Gyms and Fitness Centers

98) While it appears the guidance and requirements placed on gyms and fitness centers are working, it is not an indication that restrictions should be drastically reduced or eliminated.

99) As discussed above, supra ¶¶ 69-73, masks are an important tool to reduce the spread of COVID-19.

100) This becomes especially important during any physical activity leading to increased forced exhalations as excess respiratory droplets will be spread farther during an intense workout, which increase the risks of spreading the virus.

101) However, compliance with mask mandates during vigorous exercise presents challenges due to the discomfort and breathing restrictions caused by mask wearing. These challenges will lead to people removing their masks during their workouts.

102) The WHO has even cautioned against wearing masks during exercise based on increased challenges to breathing with a face covering and increased micro-organisms from sweat. **Exhibit YY**. This only further emphasizes the inherent risks and dangers presented from vigorously working out in a closed space.

103) The CDC has warned that COVID-19 has been shown to spread at gyms, fitness classes, and studios through exposure to respiratory droplets carrying infections virus. **Exhibit ZZ**.

104) Numerous examples demonstrate this very real risk that gyms present. See **Exhibit AAA** (a gym in San Diego linked to a COVID-19 outbreak); **Exhibit BBB** (a gym in Honolulu linked to more than 40 COVID-19 cases); **Exhibit CCC** (an indoor cycling studio in Canada also linked to more than 40 COVID-19 cases); **Exhibit DDD** (a national fitness dance instructor workshop in South Korean linked to 110 COVID-19 cases).

105) In the example from South Korea, a study indicated that the “[c]haracteristics that might have led to transmission from the instructors in Cheonan include large class sizes, small spaces, and intensity of the workouts. The moist, warm atmosphere in a sports facility coupled

with turbulent air flow generated by intense physical exercise can cause more dense transmission of isolated droplets.” Id.

Reducing Density Reduces Risk

106) Restrictions or limitations on the operation of non-essential businesses are necessary to reduce density and ensure sufficient space for proper distancing, thereby reducing potential transmission rates.

107) This is because limiting indoor capacity in public areas, such as bars, restaurants, and gyms, reduces the risk of transmission of COVID-19.

108) The effectiveness of capacity reductions on reducing the spread of COVID-19 was recently summarized in the New York Times Article “The Magic Number for Reducing Infections and Keeping Businesses Open.” **Exhibit EEE.**

109) That article discusses research from scientists at Stanford and Northwestern Universities, who found that caps on density “offer one way to keep the economy humming along during the worst of the winter wave.” Id.

110) Their research pointed to a ““sweet spot”” of capacity/occupancy reductions that optimized the balance between infection reductions and business productivity: “That magic number: around 20 percent. If indoor capacity in public spaces like restaurants, gyms, hotels and grocery stores was reduced to just 20 percent, we could prevent 87 percent of new infections. Meanwhile, these businesses would lose just 42 percent of their visits.” Id.

111) This research was based on extensive statistical modeling to track the movements of persons and their visits to non-residential locations that might be more crowded and therefore associated with a higher risk of COVID-19 infection. The researchers “construct[ed] fine-grained

dynamic mobility networks from mobile-phone geolocation data, and use[d] these networks to model the spread of SARS-CoV-2 within 10 of the largest metropolitan statistical areas (hereafter referred to as metro areas) in the USA.” **Exhibit FFF**.

112) “These networks map[ped] the hourly movements of 98 million people from census block groups (CBGs), which are geographical units that typically contain 600–3,000 people, to specific points of interest (POIs).” Id.

113) Indoor capacity restrictions, which allow for proper social distancing or separation, in combination with strict cleaning protocols and mask wearing, provide the greatest chance of mitigating the risk of COVID-19 transmission. **Exhibit GGG.**²¹

Responsible Parties

114) For industries where people may gather, guidelines are directed at a responsible party – the individual who will ensure that the guidelines and Executive Orders are being adhered to at the gatherings. See <https://forward.ny.gov/statewide-guidelines>. It is the responsible party for any gathering who must ensure that masks are worn, soap and water and/or hand sanitizer are available, proper distances are maintained, and any necessary markings are made on the floor or ground to show proper distancing.

115) It is important for Responsible Parties to follow State and local guidance to prevent transmission of COVID-19.

116) True and accurate copies of the following documents are attached hereto:

²¹ This article advocates for masks and social distancing, and describing various administrative controls to reduce the risk of airborne transmission of COVID-19 in indoor spaces, including “practices designed to reduce crowding or occupancy”

Exhibit A: WHO Situation Report – 1.

Exhibit B: WHO Novel Coronavirus (2019-nCoV) Situation Report – 3.

Exhibit C: Statement on the Second Meeting of the International Health Regulations (2005) Emergency Committee Regarding the Outbreak of Novel Coronavirus (2019-nCoV).

Exhibit D: WHO Director-General’s Opening Remarks at the Media Briefing on COVID-19.

Exhibit E: National Emergency Proclamation signed by President Trump on March 13, 2020.

Exhibit F: Governor Cuomo’s Executive Order 202.

Exhibit G: Governor Cuomo’s Executive Order 202.1.

Exhibit H: Governor Cuomo’s Executive Order 202.3.

Exhibit I: Governor Cuomo’s Executive Order 202.4.

Exhibit J: Governor Cuomo’s Executive Order 202.5.

Exhibit K: Governor Cuomo’s Executive Order 202.6.

Exhibit L: Governor Cuomo’s March 20, 2020 Press Release detailing the New York State on PAUSE Plan.

Exhibit M: Governor Cuomo’s Executive Order 202.10.

Exhibit N: Governor Cuomo’s Executive Order 202.16.

Exhibit O: Governor’s Cuomo’s Executive Order 202.17.

Exhibit P: Governor’s Cuomo’s Executive Order 202.34.

Exhibit Q: Governor Cuomo’s announcement of the UK strain in New York.

Exhibit R: Governor Cuomo’s announcement on December 16, 2020.

Exhibit S: CDC’s Scientific Brief: *Emerging SARS-CoV-2 Variants*.

Exhibit T: WHO Scientific Brief: *Transmission of SARS-CoV-2: Implications for*

Infection Prevention Precautions.

Exhibit U: WHO's Question and Answer Page regarding *Coronavirus Disease (COVID-19): How is it Transmitted?*.

Exhibit V: CDC's Media Statement on Updates to *How COVID is Spread*.

Exhibit W: CDC's *Cleaning and Disinfection for Households, Detailed Disinfection Guidance*.

Exhibit X: CDC's *Symptoms of Coronavirus*.

Exhibit Y: CDC's *Social Distancing, Quarantine, and Isolation*.

Exhibit Z: Wong DWS, Li Y (2020), "Spreading of COVID-19: Density matters. PLOS ONE 15(12): e0242398.

Exhibit AA: CDC's *Considerations for Restaurant and Bar Operators*.

Exhibit BB: Proceedings of the National Academy of Sciences' *Identifying Airborne Transmission as the Dominant Route for the Spread of COVID-19*.

Exhibit CC: The Hill, *Mask Mandates are Constitutionally Permissible* (July 31, 2020).

Exhibit DD: CDC's Scientific Brief: *Community Use of Cloth Masks to Control the Spread of SARS-CoV-2*.

Exhibit EE: Seattle Times article, *Infected after 5 minutes, from 20 feet away: South Korea study shows coronavirus's spread indoors*.

Exhibit FF: Kwon KS, Park JI, Park YJ, Jung DM, Ryu KW, Lee JH. *Evidence of Long-Distance Droplet Transmission of SARS-CoV-2 by Direct Air Flow in a Restaurant in Korea*; J Korean Med Sci. 2020 Nov;35(46):e415.

Exhibit GG: Lu, Jianyun, et al., *COVID-19 Outbreak Associated with Air Conditioning in Restaurant, Guangzhou, China, 2020*. Emerging Infectious Diseases vol. 26,7 (2020): 1628-1631.

Exhibit HH: NPR, *Can Air Conditioners Spread COVID-19?* (Aug. 15, 2020).

Exhibit II: Center for American Progress, *A New Strategy to Contain the Coronavirus* (Aug. 6, 2020).

Exhibit JJ: New York Times, *The Nation Wanted to Eat Out Again. Everyone Has Paid the Price* (Aug. 12, 2020; updated September 9, 2020), (discussing data showing community COVID-19 outbreaks in cities and states that permitted indoor dining "stemmed from bars and restaurants").

Exhibit KK: CDC Article, *Community and Close Contact Exposures Associated with COVID-19 Among Symptomatic Adults \geq 18 Years in 11 Outpatient Health Care Facilities—United States* (July 2020).

Exhibit LL: Food Service Guidelines for Employers and Employees

Exhibit MM: Governor Cuomo’s Executive Order 202.81.

Exhibit NN: Governor Cuomo’s Executive Order 202.89.

Exhibit OO: New York City issued FAQs.

Exhibit PP: Guidance from the New York State Liquor Authority.

Exhibit QQ: Governor Cuomo’s announcement on February 8, 2021.

Exhibit RR: Governor Cuomo’s announcement on February 19, 2021.

Exhibit SS: Kadi, Nadjat & Khelfaoui, Mounia, *Population density, a factor in the spread of COVID-19 in Algeria: statistical study*, Bulletin of the National Research Centre, Vo. 44.1 (2020), (finding correlation between population density and number of COVID-19 cases).

Exhibit TT: c.f. Hamidi, Shima, Sabouri, Sadegh & Ewing, Reid, *Does Density Aggravate the COVID-19 Pandemic?*, Journal of the American Planning Association (2020), (preliminary study finding no correlation between density and COVID-19 infections, but finding that “connectivity between counties matters more than county density for pandemic spread and lethality” and that “[t]he more connected the places (either compact or sprawling) in large metropolitan areas are, the harder they are hit by the pandemic”).

Exhibit UU: CDC Testing Strategy for Coronavirus (COVID-19) in High-Density Critical Infrastructure Workplaces after a COVID-19 Case Is Identified.

Exhibit VV: Governor Cuomo’s Executive Order 202.57.

Exhibit WW: DOH Interim Guidance for Gyms & Fitness Centers During the COVID-19 Public Health Emergency.

Exhibit XX: DOH Interim Guidance for Sports and Recreation During the COVID-19 Public Health Emergency.

Exhibit YY: WHO, Poster on masks and exercising.

Exhibit ZZ: CDC’s *Personal and Social Activities*.

Exhibit AAA: CNN, *San Diego gym that defied a shutdown order linked to a coronavirus outbreak* (July 31, 2020).

Exhibit BBB: Honolulu Civil Beat, *Coronavirus Cluster at Hawaiian Airlines Ignites Outbreak at Oahu Gyms* (July 13, 2020).

Exhibit CCC: CTV, *Outbreak connected to Calgary fitness club balloons to more than 40 cases* (July 23, 2020).

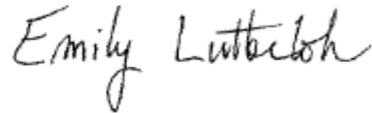
Exhibit DDD: CDC Article, *Cluster of Coronavirus Disease Associated with Fitness Dance Classes, South Korea*.

Exhibit EEE: New York Times, *The Magic Number for Reducing Infections and Keeping Businesses Open* (December 16, 2020).

Exhibit FFF: Chang, S., Pierson, E., Koh, P.W., *et al.* “Mobility network models of COVID-19 explain inequities and inform reopening”. Nature 589, 82–87 (2021).

Exhibit GGG: United States Environmental Protection Agency article *Implementing a Layered Approach to Address COVID-19 in Public Indoor Spaces*.

Dated: February 23, 2021
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